

REMARKS

Applicant has carefully reviewed and considered the Office Action mailed on March 3, 2006, and the references cited therewith.

Claims 1, 3-5, 10-17, 21, 22, 43, 45-47, 52-59, 63 and 64 are amended. Claims 23-42 were previously canceled. No additional claims have been canceled and no claims are added by this amendment. Accordingly, claims 1-22 and 42-64 remain pending in this application.

Claim Rejections – 35 U.S.C. § 112

In the Office Action, the Examiner rejected claims 1-22 and 43-64 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention. The foregoing amendments address the concerns of the Examiner. Specifically, for example, the claims have been amended to recite a first link integrity indication frame and a second link integrity indication frame. Accordingly, Applicants respectfully request that the rejections under 35 U.S.C. § 112 be withdrawn. Applicants also note that the foregoing amendments also address matters of form and place the claims in better condition for allowance.

Claim Rejections – 35 U.S.C. § 102

The Examiner also rejected claims 1-22 and 43-64 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 6,360,260 to Compliment, et al. (hereafter “Compliment”). Applicants respectfully traverse this rejection.

It is well settled that in order to establish a case of anticipation each and every element of a rejected claim must be described or disclosed in a single prior art reference. Applicants respectfully submit that Compliment does not anticipate claims 1-22 and 43-64 as it does not disclose or describe each and every element of those claims.

Claim 1, as amended, recites:

In a communications network, a method of verifying connectivity between a first node and one or more network nodes, comprising:
providing indications of elapsed periodic time intervals at the first node,
transmitting a first link integrity indication frame to the one or more network nodes, the first link integrity indication frame including a source identifier that uniquely identifies the first node;

counting elapsed periodic time interval indications subsequent to the transmitting of the first link integrity indication frame to produce a count for the first node;

receiving frames from the one or more network nodes and maintaining, during each periodic time interval, a node state status and a current received frame source identifier;

determining the node state status upon the expiration of a predetermined elapsed time based on the count for the first node;

transmitting a second link integrity indication frame based upon determining the node state status as being indicative of not having received frames from a plurality of the network nodes during the predetermined elapsed time; and

resetting the count for the first node as a result of transmitting the second link integrity indication frame.

Claim 1 is directed to a method of verifying connectivity between a first node and one or more network nodes. The method of claim 1 includes providing indications of elapsed periodic time intervals at the first node and counting elapsed time intervals (e.g., indications) subsequent to transmission of a first link integrity frame. Therefore, in methods in accordance with claim 1, after transmitting of the first link integrity frame, a count is kept for the first node of a number of elapsed periodic time intervals since that transmission.

The Examiner asserts that this aspect of claim 1 is disclosed at column 8, lines 4-11 of Compliment, which recites:

Watch Dog Timer Interval--this timer interval specifies the time to dispatch the discovery feature task that is specified in this invention and is described below. The value correlates to the poll period used by the Management Stations. This value should be set to the longest poll interval from the list of management stations (plus a buffer of up to 60 seconds to account for network and/or processing delays).

This portion of Compliment merely describes a timer interval for a watch dog timer that is used to specify the time to dispatch a discovery feature task (i.e., for discovery of simple network management protocol devices (SNMP)) on a network. While the watch dog timer interval of Compliment may be used to provide a periodic time interval, Compliment does not disclose, describe or even mention counting of periodic time intervals subsequent to the transmission of a first link integrity frame. Furthermore, from Applicants' review of Compliment, the operation of the watchdog timer in Compliment is not dependent on the transmission of a first link integrity frame. Therefore, based on the foregoing, Compliment does not disclose, describe or even mention "counting elapsed periodic time interval indications subsequent to the transmitting of

the first link integrity indication frame to produce a count for the first node”, as recited in claim 1.

The Examiner further states that Figure 8 of Compliment and column 6, lines 9-23 disclose a first link integrity frame and counting of elapsed periodic time intervals. Column 6, lines 9-23 of Compliment recites:

Turning to FIG. 8 for the moment, a graphical representation of the general format for an ethernet frame is shown. The frame can be used to transport information according to the teachings of the present invention. The frame includes the following fields: Preamble, Destination Address (DA), Source Address (SA), ethernet type (0800), IP and TCP headers, Data and Frame Check Sequence (FCS). The SNMP Requests, SNMP Responses, SNMP Traps and ICMP Ping Frames are coded in the IP and TCP header field of the frame. The functions of the other fields and the information that goes into them are so well known that further descriptions are not warranted. In addition, other frame formats, such as IEEE 802.3 or IEEE 802.5 (Token Ring), are well known and further description of such well known formats will not be given.

As described in Compliment, Figure 8 is a general format for an Ethernet frame. The above portion of Compliment (cited by the Examiner) does not disclose, describe or even mention counting a number of periodic time intervals since the transmission of a first link integrity frame.

The Examiner further asserted that Compliment discloses the aspect of claim 1 where “resetting the count for the first node as a result of transmitting the second link integrity indication frame.” The Examiner has cited to column 3, lines 4-30, Figure 6, column 10, lines 1-5 and column 12, lines 20-23 as disclosing this aspect of claim 1. Applicant has examined these portions of Compliment and can find no discussion of a count of periodic time intervals being reset as a result of transmitting a second link integrity frame. The portions of Compliment cited by the Examiner relate to setting a watchdog timer using a watchdog timer interval in response to a Get Request Frame. The watchdog timer is used to time a registration process. There is, again, no discussion of counting periodic time intervals since the transmission of a first link integrity frame. As Compliment does not disclose counting periodic time intervals it follows that Compliment also does not disclose clearing a count of periodic time intervals.

Applicants respectfully assert that claim 1 distinguishes from Compliment on bases other than those described above. However, because Applicants believe the foregoing is sufficient to overcome the Examiner’s anticipation rejection, those bases are not discussed in detail here. Briefly, however, Applicants respectfully assert that Compliment, for example, does not disclose,

describe or even mention "transmitting a second link integrity indication frame based upon determining [a] node state status as being indicative of not having received frames from a plurality of ... the network nodes during [a] predetermined elapsed time." Applicant, of course, reserves the right to further expound on such bases should the Examiner reassert Compliment against the application in a subsequent Office Action.

Based on the foregoing, Applicants respectfully assert that claim 1 is not anticipated by Compliment. Therefore, the rejection of claim 1 should be withdrawn.

The other independent claims 12, 43 and 54 include limitations that are substantially similar to the limitations of claim 1 discussed above. Thus, claims 12, 43 and 54 are not anticipated by Compliment for the same reasons discussed above with respect to claim 1, and the rejection of claims 12, 43 and 54 should also be withdrawn.

Claims 2-11 depend from claim 1, claims 13-22 depend from claim 12, claims 44-53 depend from claim 43 and claims 55-63 depend from claim 54. Accordingly, claims 2-11, 13-22, 44-53 and 55-63 are also not anticipated by Compliment by virtue of their respective dependence on claims 1, 12, 43 and 54, and the rejections should be withdrawn.


Conclusion

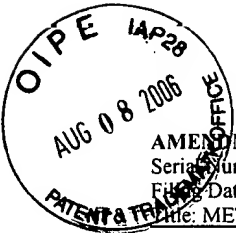
Applicants respectfully submit that the claims are in condition for allowance and respectfully request notification to that effect. If there are any issues that may be resolved via a telephonic interview. The Examiner may telephone Applicants' attorney (703-286-5735) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-3521.

Respectfully submitted,
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703-286-5735

Date August 3, 2006

By: 
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AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/619,553

Filing Date: July 19, 2000

Title: METHOD AND APPARATUS FOR VERIFYING CONNECTIVITY AMONG NODES IN A COMMUNICATIONS NETWORK

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Dkt: BU1104/0033-031001

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that the foregoing AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111 is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 3rd day of August, 2006.

Shellie Bailey

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Signature